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WETHERSFIELD — Kevin wants to do more, in spite of his disability.

The young man, employed by CW Resources, a New Britain company that provides work for the disabled, has Baller-Gerold Syndrome, rare genetic disorder that leaves him with missing fingers and compromised dexterity.

Already packing clip binders and assisting with Meals on Wheels, Kevin, 21, would like to help build earplug boxes that CW Resources makes for the U.S. military. But his condition prevents him from inserting the chain used to hang the boxes on uniforms.

Enter the Wethersfield High School Engineering Club. After four prototypes and about two months of hard work, all of it after school, club members created an elegant device that enables Kevin and other CW clients to install the chain with relative ease.

"I'm excited," Kevin said. "It's a new job."

CW Resources Facility Manager Christopher Cauffman said that the company loves the students' invention, calling it superior to designs submitted by college students.

"It was simpler and more efficient," Cauffman said. "We really feel that it's going to allow some of our folks to do that particular aspect of the job."

Now, the club is on the cusp of national recognition. The invention won Wethersfield High School one of five finalist spots at the 11th annual AbilityOne Design Challenge Feb. 14 and 15 in Washington D. C.

The nationwide competition challenges high school students to create devices that assist the disabled in the workplace. The five finalists were chosen from among hundreds of schools. Winners will receive up to \$5,000 in prizes.

Veteran physics teacher Sue Fennelly, the club's longtime advisor, praised the students for their hard work and innovation. When students toured CW Resources looking for an AbilityOne project, they chose the hardest challenge.

"It's exciting to work with these kids," she said. "These are extraordinary people. It gives me hope for the future."

Fennelly called AbilityOne the perfect vehicle to teach STEM — Science, Technology, Engineering and Math — a discipline that experts say is key to the nation's economic future.

"I think it's the ultimate STEM event because the kids have to go through the entire design process, from finding the problem to finding solutions to the problem," she said. "But because it involves them being aware of the disabled, it goes to a whole other level."

This club has made the AbilityOne finals or top 25 the last four years, coming in second last year with a device that elevates a lower filing cabinet drawer to eye level for people who use wheelchairs, Fennelly said. Another product was the "Walk In," a walker with legs that adjust up and down to negotiate stairs and slopes. Its inventors are seeking a patent, she said.

Club Captain Benjamin Grant, 18, said that working with the disabled has made a deep and lasting impression on him. He never expected to join the engineering club and help the disabled, he said.

"I thought I was going to come to high school and go home to play video games," said Grant, who is thinking of studying biomedical engineering in college. "It opened my eyes seeing people with disabilities. I'm so happy that can help people."

The club's 21 members aren't all future scientists and engineers. AbilityOne also requires a description of the problem addressed, a written engineering solution, a marketing plan and a video. That leaves room for the less technically inclined, like senior Matthew Wilson.

"Someone has to do the papers and the video," said Wilson, who added that the experience made him want to get into politics to address disability and other issues.

After the contest, the club will work out a few remaining bugs and give the device to CW Resources, Cauffman said. The company is the sole provider of the earplug boxes to the military through a program that employs the disabled, producing 300,000 to 500,000 a year, he said.

About 130 workers, all of them disabled, assemble the boxes' five parts at company facilities in New Britain and West Hartford, he said.

RW is so pleased that it sending Cauffman and Kevin to the contest to cheer on the kids.

"I hope we win," Kevin said.

[Click Here to View a Video About the Wethersfield High School Engineering Club's Invention](#)

